UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,461	07/30/2003	Lynda Fengler	200301157-1	9160

22879 7590 12/28/2007		EXAMINER
HEWLETT PACKARD COMPANY		INGBERG, TODD D
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INTELLECTUAL PROPERTY ADMINISTRATION	ART UNIT	PAPER NUMBER
FORT COLLINS, CO 80527-2400	2193	

NOTIFICATION DATE	DELIVERY MODE
12/28/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM
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PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 April 2007*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-34* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>7/30/2003</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Claims 1 – 34 have been examined.

Drawings

1.   New Figure filed September 25, 2007 has been accepted.

Specification

2.   The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. Legal words like method and system should be removed. Examiner appreciates the Applicant's position. At time of allowance the Examiner will revisit the title.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 1- 3 and 5 - 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over the commercial product by Hewlett Packard, known as OpenView (Also, sold by Computer Associates under the name UniCenter TNG – see HP, page 189), as taught by Nathan Muller in the text book, "Focus on HP OpenView A Guide to Hewlett-Packard's Network and Systems Management Platform" (Referred to as **HP**), published March 1995 in view of USPN #5,622,604 **Russell** et al filed November 18, 1992 and issued April 22, 1997.

Claim 1
A methods for facilitating installation of firmware on a printing device, the method comprising: transmitting from a computer a notification that firmware is available for installation on a printing device; receiving with the computer a firmware download request; and transmitting a

firmware file directly to the printing device to enable installation of the firmware on the printing device.

Rejection for Claim 1

HP is a commercial product which is also sold as Computer Associates UniCenter TNG (HP, page 189), that teaches managed environments to provide Network and System Management (HP, page 1). HP provides the ability to download firmware (HP, pages 256, 116). HP supports the ability to execute actions such as PUSH (locally executed) or PULL operations (remote execution) of actions by providing the ability to execute actions locally or remotely in support of the environment (HP, Action Execution, page 69). And provides communications with messaging to intelligent network devices/ peripheral such as printers (HP, page 67, message allowed). In addition to the enabling of messaging to devices HP supports the use of email to support operations of the managed environment (HP, pages 130, 165) One of ordinary skill should find use of email to send a notification well within the grasp and part of the intended use of email. HP provides for tracking changes on remote devices and registers the information (HP, pages 164, 193) and determining the status of hardware, software and firmware (HP, Auto Discovery, page 164 and HP, Change Orchestration, page 184). Downloads and configurations of what is installed and the dependencies of installed products is maintained in HP OpenView (HP, page 182 – Software Management and HP, page 179 - 181, Software Distributor and Distribution Overview , Distribution Depots, Target System). Although, HP provides the infrastructure to support intelligent devices. the reference does not explicitly teach a printer requesting a download and installing on the printer the firmware update. It is Russell who explicitly teaches the updating of the firmware on a printer (Russell, Col 2, lines 45 – 61, firmware image). And Russell teaches the request for update coming from the printer (Russell, See Figure 20, S2004 download new software and see S2002 the board in the printer is the target and must reply). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to take the infrastructure and capabilities of HP OpenView and support the ability of Intelligent peripherals as taught by Russell and enable Intelligent peripherals to be supported in the managed environment, because "… printers can be directly updates and eliminate the necessity of dedicating a personal computer to manage printers (Russell, col 1, lines 10 - 20).

Claim 2

The method of claim 1, wherein transmitting a notification comprises transmitting a notification directly to the printing device.

Rejection for Claim 2

HP teaches the ability to communicate with intelligent devices (HP, page 67) and the ability to determine changes in the environment by tracking ongoing changes and dynamically updates the map to reflect those changes (HP, page 164). Therefore, it would be obvious to one of ordinary skill in the art at the time of invention to utilize the features of HP OpenView to support the updating of intelligent devices/ peripheral by tracking changes (See claim 1), determining updates based on gathered information (HP, see claim 1) and downloading firmware updates to an intelligent device (printer). Because keeping managed environments up to date with automated change management (HP OpenView), saves money.

Also, Russell Figure 20 shows a broadcast for target NEB the board in the printer.

Claim 3
The method of claim 1, wherein transmitting a notification comprises transmitting an email to the user. HP teaches the use of email messages to support the managed environment (HP, pages 130, 165). The use of sending an email to support operations such as notifying a user of an update is deemed intended use of email and taught by the HP reference.

Claim 5
The method of claim 1, wherein receiving a firmware download request comprises receiving a firmware download request transmitted is the computer from the printing device. (Russell, Figure 20, S2002 the printer which is the target must reply and the download is directly to the board in the printer, #s2003 and S2004).

Claim 6
The method of claim 1, wherein transmitting a firmware file comprises transmitting a remote update (RFU) file directly to the printing device. HP, stores the code to update in the Software Distribution system for each target system (HP, pages 179-181).

Claim 7
The method of claim 1, further comprising registering the printing device with a firmware service (HP, page 68, collecting data from managed nodes and HP, page 164, Auto Discovery) and determining whether to transmit a notification based upon information that was collected through registration of the printing device (HP, pages 76 – 79).

Claim 8
A system for facilitating installation of firmware on a printing device the system comprising:
        means for transmitting a notification to a device indicating that new firmware is available for installation on the printing device;
        means for receiving a firmware download request; and
        means for transmitting a firmware file directly to the printing device.
As per claim 1.

Claim 9
The system of claim 8, wherein the means for transmitting a notification comprise means for transmitting a notification directly to a printing device. As per claim 2.

Claim 10
The system of claim 8, wherein the means for transmitting a notification comprise means for transmitting an email message to a user, the email message including a link to a network page at which firmware download can be requested. As per claim 4.

Claim 11
The system of claim 8, wherein the means for transmitting a firmware file comprise means for transmitting a remote firmware update (RFU) file to the printing device. As per claim 6.

Claim 12
The system of claim 8, further comprising means for registering a printing device with a firmware service. As per claim 7.

Claim 13
A method for facilitating installation of firmware on a printing device, the method comprising: a peripheral device receiving a firmware availability notification; and the printing device providing a related notification to a user. (Russell Figure 20 shows a broadcast for target NEB the board in the printer). And Figure 20, #2006, shows a notification of the Operator for errors from the download.

Claim 14
The method of claim 13, wherein the printing device providing a related notification to a user comprises the printing device providing a notification on a network page (HP, page 77, Message Browser) using a network server embedded in the printing device (Russell, Figure 20 shows the device is directly connected (Claim 1 motivation) and handles notifications (also claim1), also part of HP – claim 1 – intelligent peripheral).

Claim 15
The method of claim 13, wherein the printing device providing a related notification to a user comprises the printing device transmitting a message to a user computing device. (Russell, col 2, lines 20-25).

Claim 16
The method of claim 13, wherein the printing device providing a related notification to a user comprises the printing device displaying a notification in a display of the printing device.
(HP, communications to intelligent peripherals of claim1 and notifications in OpenView in claim 1 and the printing of the notification on the printer (Note – "display of the printer device" – can display of a message.)

Claim 17
The method of claim 13, further comprising the printing device receiving a request to install available firmware. (As per claim 1, see the ability to perform PUSH operations and communicate with intelligent peripherals)

Claim 18
The method of claim 17, further comprising the printing device transmitting a firmware download request to a firmware service. (HP as per claim 1, the ability to execute remotely and Russell, Figure 20, #S2003 and S2004).

Claim 19

The method of claim 18, further comprising. the printing device receiving a firmware file and installing the firmware on the printing device. (Russell, Figure 20, S2007 run the downloaded file).

Claim 20
A system for facilitating installation of firmware on a printing device, the system comprising:
    means provided on a printing device for receiving a notification from a firmware service that new printing device firmware is available for download; and means provided on the printing device for providing a related notification to a device user. As per claim 1.

Claim 21
The system of claim 20, wherein the means for providing a related notification comprise an embedded network server of the printing device that is configured to post a notification on a network page. See claim 14.

Claim 22
The system of claim 20, wherein the means for providing a related notification comprise means for transmitting a message from the printing device to a user computing device. As per claim 15.

Claim 23
The system of claim 20, wherein the means for providing a related notification comprise means for displaying a notification in a display of the printing device. As per claim 16.

Claim 24
The system of claim 20, further comprising means for receiving and installing a firmware file on the printing device. As per claim 19.

Claim 25
A computer readable medium that contains a firmware service, the service comprising:
logic configured to transmit firmware availability notifications directly to the printing devices:
logic configured to receive firmware download requests from the printing device; and logic configured to transmit firmware files directly to the printing devices.
See the rejection for claim 1, claim 5 and claim 6.

Claim 26
The computer readable medium of claim 28, wherein the logic configured to transmit firmware files comprises logic configured to transmit remote firmware update (RFU) files directly to the printing devices. As per claim 6.

Claim 27
The computer-readable, medium of claim 25, further comprising logic configured to register printing devices with the firmware service. As per claim 7.

Claim 28

The computer-readable medium of claim 27, further comprising logic configured to determine whether to transmit firmware availability notifications based upon collected printing device registration information. As per claim 7.

Claim 29
A printing devices, comprising: memory including logic configured to directly receive firmware availability notifications that are transmitted by a firmware service via a network; and logic configured to provide related notifications to a user. As per claims 1, 2 and 3.

Claim 30
The printing device of claim 29, wherein the logic configured to provide related notifications comprises an embedded network server that is configured to post notifications on network pages accessible via a network browser. See claim 14.

Claim 31
The printing device of claim 29, wherein the logic configured to provide related notifications comprises logic configured to transmit email messages to a user computing device that indicate that firmware is available for installation. As per claim 3.

Claim 32
The printing device of claim 29, further comprising a display and wherein the logic configured to provide related notifications comprises logic configured to present notifications in the display. As per claim 16.

Claim 33
The printing device of claim 29, further comprising logic configured to receive a firmware installation request and logic configured to transmit a firmware download request to the firmware service. As per claim 1.

Claim 34
The printing device of claim 33, further comprising logic configured to receive and install firmware files. As per claim 19.

5.   Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over HP and Russell as applied to claims 1 –3 and 5 - 31 above, and further in view of USPN #6,424,424 Lomas, filed January 19, 1999.

Although, HP OpenView disclosed Motif (HP, page 164 and 190) and intelligent peripherals. Russell's intelligent peripheral communicates on a network Where the printer is connected directly to the network eliminating the need for a personnel computer to manage printer(s).

Neither specifically disclose the use of an email specifically for an update. It is Lomas who

teaches the use of the use of an embedded link in an email for a network printer (Lomas,

Abstract and Figure 1). Therefore, it would have been obvious to one of ordinary skill in the art

at the time of invention to combine HP, Russell and Lomas, because the embedded link in email

provides a means of giving instruction for installation (Lomas, col 1, lines 30-42).

Claim 4
The method of claim 3, wherein transmitting an email message to a user comprises transmitting a

link to a network page at which firmware download can be requested (As per above)

Response to Arguments

6.   Applicant's arguments with respect to claim 1-31 have been considered but are moot in

view of the new ground(s) of rejection.

Correspondence Information

7.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Todd Ingberg whose telephone number is (571) 272-3723. The

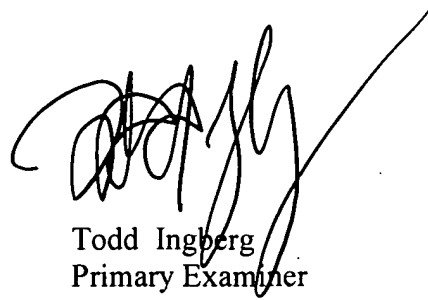examiner can normally be reached on during the work week..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization

where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application

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like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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TI